Title (en)

IMAGE PROCESSING WITH INTRA PREDICTION HAVING FRACTIONAL PIXEL PRECISION

Title (de)

BILDVERARBEITUNGSVORRICHTUNG UND -VERFAHREN

Title (fr)

DISPOSITIF ET PROCÉDÉ DE TRAITEMENT D'IMAGES

Publication

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Application

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Abstract (en)

The present invention relates to an image processing device and method which enable encoding efficiency in intra prediction to be improved. In the event that the optimal intra prediction mode is mode 0, adjacent pixels to be used for prediction of the current block are pixels A 0 , A 1 , A 2 , and A 3 . According to these pixels and a 6-tap FIR filter, pixels a -0.5 , a +0.5 , and so on with 1/2 pixel precision are generated, and further, pixels a -0.75 , a -0.25 , a +0.25 , and a +0.75 with 1/4 pixel precision are generated by linear interpolation. Subsequently, the optimal shift amount is determined with a value of -0.75 through +0.75 that is phase difference between an integer pixel and generated fractional pixel precision serving as a candidate of the shift amount in the horizontal direction. The present invention may be applied to an image encoding device which performs encoding using the H.264/AVC system, for example.

IPC 8 full level

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CPC (source: BR EP KR RU US)

G06T 9/004 (2013.01 - BR US); **H04N 19/105** (2014.11 - EP US); **H04N 19/11** (2014.11 - KR); **H04N 19/117** (2014.11 - EP US); **H04N 19/154** (2014.11 - EP US); **H04N 19/159** (2014.11 - EP US); **H04N 19/176** (2014.11 - EP US); **H04N 19/182** (2014.11 - EP US); **H04N 19/40** (2014.11 - US); **H04N 19/44** (2014.11 - US); **H04N 19/523** (2014.11 - EP KR US); **H04N 19/593** (2014.11 - RU); **H04N 19/61** (2014.11 - EP US); **H04N 19/82** (2014.11 - EP US); H04N 19/105 (2014.11 - BR); H04N 19/11 (2014.11 - BR EP US); H04N 19/117 (2014.11 - BR); H04N 19/154 (2014.11 - BR); H04N 19/159 (2014.11 - BR); H04N 19/176 (2014.11 - BR); H04N 19/182 (2014.11 - BR); H04N 19/40 (2014.11 - BR); H04N 19/44 (2014.11 - BR); H04N 19/52 (2014.11 - BR EP US); H04N 19/523 (2014.11 - BR); H04N 19/61 (2014.11 - BR); H04N 19/82 (2014.11 - BR)

Citation (applicant)

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